GOVERNMENT OF THE PUNJAB

TECHNICAL EDUCATION & VOCATIONAL TRAINING AUTHORITY

CURRICULUM FOR

Diploma in Information Technology
(1-Year course)
(Revised 2012)

CURRICULUM SECTION

ACADEMICS DEPARTMENT

96-H, GULBERG-II, LAHORE

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TRAINING OBJECTIVES:

The Course aims to producing the trained man-power in the field of Information Technology to fulfill employment requirement of I.T. industry not only in the country, but also abroad. The curriculum is divided into two academic semesters The curriculum of Semester-I is designed to train the students to work as database developer and work on the MS-office alongwith touch of E-Commerce. The curriculum of semester-II is designed to train the students in the field of Networking, Graphics Design & Animation and Interactive web development.

CURRICULUM SALIENTS:-

Name of Course:	Diploma in Information Technology
Entry Level:	Intermediate or Equivalent.
Duration:	One Year The course consist of Two Semesters with 20 weeks of teaching delivery duration each
Total Training Hours:	1600 Hours (800 hours per Semester)
Training Hours:	40 Hours/week 7 Hours per day (Friday 05 Hours)
Training Methodology:	Practical 80% Theory 20%
Medium of Training	Urdu / English

SKILL PROFICIENCY DETAILS

On successful completion of this course, the trainee should be able to:

1. Work on different operating systems like DOS, Windows 7 & Linux.
2. Work on different Business applications (MS-Word. 2010, MS-Excel 2010 & MS – Power Point 2010)
3. Exercise Business Communication Skills & Report writing.
4. Develop and Manage Database Management System.
5. Apply and Analyze E-Commerce issues.
6. Design, Develop and manage interactive Web sites.
7. Develop Financial Accounting related issues in E-Commerce/Desktop applications and integrate them in different projects.
8. Host and upgrade the Web sites.

KNOWLEDGE PROFICIENCY DETAILS

On successful completion of this course, the trainee should be able to understand, define and recognize:-

1. EDP concept
2. Different operating systems (DOS, Windows, Linux).
3. Internet, Word processing, Spread Sheet and Multimedia presentation.
4. Business communication issues inside/out side the organization and report writing.
5. Database Concepts and requirements with MS-Access.
6. Programming logic using flowchart and developing front-end using VB.Net
7. System Analysis and Design.
8. Web Designing and Development
9. Web Programming with HTML and Java Script
10. Interactive Web programming using PHP, MySql & Apache Web Server.
11. Host and upgrade the Web sites.

CURRICULUM DELIVERY STRUCTURE

1st SEMESTER

	Course delivery	Co-Curricular activities/vacations	Project	Test	Total
Week	1 – 20	21 – 23	-	-	
	20	3	0	1	26

2nd SEMESTER

	Course delivery	Co-Curricular activities/vacations	Project	Test	Total
Week	1 – 20	21 – 23	-	-	
	20	01	04	1	26

SCHEME OF STUDIES

Diploma in Information Technology
(01 Year)
SEMESTER – 01

Sr. No	Main Topics	Theory Hrs.	Practical Hrs.	Total Hrs.
1	Introduction to Computer & Operating System (DOS, Windows & Linux)	20	120	140
2	Business Application (MS-Word, MS-Excel, MS-Power Point 2010),Internet Management & E-Commerce	40	240	280
3	Database Management using MS-Access 2010	20	80	100
4	Programming Fundamentals, Flow Charts and Programming with VB. Net.	40	180	220
5	Functional English-I	20	20	40
6	Work Ethics-I	20	-	20
Total		**160**	**640**	**800**

SEMESTER – 02

Sr.#	Main Topics	Theory Hours	Practical Hours	Total Hours
1	Graphics Design & Animation	20	180	200
2	System Analysis & Design	20	20	40
3	Introduction to Computer Networking	20	120	140
4	Web Development using PHP & My SQL.	60	240	280
5	Project	-	60	60
6	Functional English-II	20	20	40
7	Work Ethics-II	20	-	20
Total		**160**	**640**	**800**

DETAIL OF COURSE CONTENTS

Diploma in Information Technology
(01 –Year Course)

Semester-I

Sr. #	Detail of Topic	Theory Hours	Practical Hours
1)	**Introduction to Computer & Operating Systems (DOS, WINDOWS 7, LINUX)**		
1.1	**INTRODUCTION TO DATA PROCESSING & COMPUTER** 1.1.1 History of Computer 1.1.2 Definition of Computer 1.1.3 Importance and Capabilities of Computers 1.1.4 Data and its types 1.1.5 Difference between data and information 1.1.6 Data processing cycle	1	
1.2	**TYPES OF COMPUTERS AND APPLICATION** 1.2.1 Digital Computer 1.2.2 Analog Computer 1.2.3 Hybrid Computer	1	
1.3	**INTRODUCTION TO EDP SYSTEM** 1.3.1 Elements of an EDP system 1.3.2 Hardware 1.3.3 Software 1.3.4 User program 1.3.5 Procedure 1.3.6 Personnel	1	
1.4	**HARDWARE CONFIGURATION** 1.4.1 Input/output devices 1.4.2 Fixed Drive (Hard Disk: IDE, SATA & SCSI) 1.4.3 Removable Drive (CD & DVD ROM, Super Drives)	1	
1.5	**CENTRAL PROCESSING UNIT (CPU)** 1.5.1 Arithmetic & logic unit (ALU) 1.5.2 Control unit	1	
1.6	**TYPES OF COMPUTER STORAGE** 1.6.1 Bit, Nibble and Byte 1.6.2 Memory unit, Cache Memory, Virtual Memory 1.6.3 Storage (Primary and Secondary)	1	
1.7	**INTRODUCTION TO COMPUTER SOFTWARE** 1.7.1 Hierarchy of Language	1	

	1.7.2 Low Level Language 1.7.3 High Level Language 1.7.4 Language translators 1.7.5 Definition of operating system		
1.8	**DEFINITION OF ELECTRONIC DATA PROCESSING** 1.8.1 On line processing 1.8.2 Batch processing 1.8.3 Multi programming 1.8.4 Multi processing 1.8.5 Time sharing 1.8.6 Data communication concepts	1	
1.9	**DISK OPERATING SYSTEM** 1.9.1 IO.SYS 1.9.1 CONFIG.SYS 1.9.1 AUTOEXE.BAT	1	
1.10	**DEVICE DRIVERS (Input / Output Devices)**		
1.11	**Practice for creating batch and config.sys files.**		6
1.12	**Disk Operating System** 1.12.1 Definition of operating system 1.12.2 Salient characteristics of MS-DOS 1.12.3 Creating a file in DOS 1.12.4 Understanding the concept of internal and external DOS commands 1.12.5 Interface concept 1.12.6 Command line and GUI		
1.13	**Practice for creating and saving DOS files.**		6
1.14	**Purpose , syntax and use of MS-DOS Commands** CLS, TYPE, MD, COPY VER, DIR, CD, X COPY DATE, EXIT, RD, MOVE TIME, PROMPT, PATH, DELTREE COPY CON, LABEL, REN, DEL / ERASE COPY, X COPY, MOVE DELTREE, DEL / ERASE	1	
1.15	**Practice for using DOS commands.**		6
1.16	**Windows 7**	2	

	1.16.1 What is Graphical User Interface (GUI) 1.16.2 Salient features of Windows as a Graphical 1.16.3 Operating System 1.16.4 Brief History of Windows 2007 1.16.5 Comparison of DOS and WINDOWS		
1.17	**Introduction with windows opening screen**		6
	1.17.1 Desktop Basics: Desktop icons of My Computer, Explorer, 1.17.2 Recycle Bin, My document, Network Place Task Bar: Start Button, Application Icons in Task Bar, Notification Area 1.17.3 Start Menu: Programs Including Accessories Application	1	
1.18	**Packages** DOS Prompt, Documents Setting Search Find Folders & Files Help Run and Shut Down Options		
1.19	**Practice for using above said options**		6
	Working with windows (new features): Opening an icon Maximizing and restoring a windows Opening a task bar button Resizing and moving windows Scrolling and closing a windows	1	
1.20	**Practice for using above said options**		6
	Using My Computer: 1.20.1 View files on storage devices i.e. Hard Disk, Flash Drive, etc.		
1.21	**Practice for using above said options.**		6
1.22	**Manage files / folders:-** 1.22.1 Selection one or more files and folders. 1.22.2 Delete, rename, cut / paste and copy a files and folders using drag and drop. 1.22.3 Shortcut keys / menu and tool bars 1.22.4 Create short cuts.		
1.23	**Practice for using above said options.** 1.23.1 Using Explorer		8

	1.23.2 Collapsing / Expanding Level to view folders/ files 1.23.3 Properties of folders / files.		
1.24	**Practice for using above said options.**		6
1.25	**Using control panel (complete):** 1.25.1 Opening Control Panel 1.25.2 Changing system date/time and regional setting 1.25.3 Customize mouse and keyboard		
1.26	**Practice for using above said options.**		8
1.27	**Advance display setting:** 1.27.1 Choosing Background 1.27.2 Screen saver, important of Screen saver 1.27.3 Resolution, system colors 1.27.4 Assignment sounds of system events 1.27.5 Add new Hardware/Software		
1.28	**Practice for using above said options.**		6
1.29	**Accessories** 1.29.1 System Tools 1.29.2 Scandisk 1.29.3 Maintenance Wizard 1.29.4 Disk Clean up 1.29.5 Task scheduler 1.29.6 Disk Defragmenter 1.29.7 System Information 1.29.8 System restore	1	
1.30	**Practice for using above said options.**		8
	1.31 Calculator 1.31.1 Opening and operation 1.31.2 Copying calculator to application 1.31.3 Adding office to shortcuts to desktop Lab: Practice for using above said options.	1	4
	1.31 Paint Drawing Rectangles, Ellipse, Circles, Squares, Paint tools, etc Lab: Practice for using above said options.		6
	1.32 Word **pad** 1.33.1 Word process of the documents 1.33.2 Cut, copy, paste operations Lab: Practice for using above said options.		6

	1.33 Program**/applications:** 1.34.1 How to run application through programs 1.34.2 Move text from one application to another 1.34.3 Simultaneously opening two windows on desktop 1.34.4 Opening/closing DOS from within program Lab: Practice for using above said options.		
	1.34 LINUX 1.35.1 Introduction to LINUX 1.35.2 Linux History 1.35.3 Use of Linux 1.35.4 Linux concepts versus DOS concepts	1	6
	1.35 Using **the system** 1.36.1 Logging in 1.36.2 Creating user 1.36.3 How to get system 1.36.4 Using the system 1.36.5 How to get help 1.36.6 Finding other user on the system 1.36.7 Communicating with other users Lab: Practice for using above said options.		
	1.36 The LINUX environment 1.37.1 Redirects 1.37.2 Pipes 1.37.3 STDIN, STDOUT,STDERR AND REDIRECTION	1	6
	1.37 Users **program** 1.38.1 Introduction to vi editor 1.38.2 Creating files 1.38.3 Editing files 1.38.4 Introduction to pico editor Lab: Practice for using above said options.	1	6
	Linux Commands Alias Cp cd D Cat c corn find Diff Exot ftb lpr Grep Kill ls more Mv mail mkdir telnet Man pwd rm Xhost Xtrem Chmod Lab: Practice for using above said commands.	1	8

2)	**BUSINESS APPLICATION** **(Internet usage, MS Office Word 2010, MS Office EXCEL 2010, MS Office Power Point 2010 & E- Commerce)** **Internet** 2.1.1 Introduction to Internet 2.1.2 Difference between Internet, Intranet and Extranet 2.1.3 Steps to create internet connection 2.1.4 Installing and configuring internet protocol TCP/IP. 2.1.5 Introduction to Internet browsers 2.1.6 Concepts And Capabilities Relating to the Internet and Basic 2.1.7 Procedures for Setting up A System for Internet Access 2.1.8 Creating online e-mail account using web services 2.1.9 Sending and receiving E-mails 2.1.10 File attachment. 2.1.11 Uploading and downloading file(s) and software(s) **Microsoft Word Introduction** 2.2.1 Environment of MS Word 2.2.2 Importance of MS Word 2.2.3 Selection of Shortcut Keys 2.2.4 Word Processor 2.2.5 Starting Word 2.2.6 Keyboard Navigation 2.2.7 Start Bar **MS Office Button** New Save as Publish Open Print Close Save Prepare Recent Documents **Quick Access Toolbar** E.MAIL Spell & Grammar Draw Table Quick Print Undo Etc Print Preview Redo **Home Ribbon** Discuss All Groups Font Editing Detail Paragraph Clipboard Styles. **Insert Ribbon** Pages Links Symbol Tables Header and Footer Illustrations Text	2 1 1 1 1 1	7 6 7 7 7 7

	Page Layout Ribbon Themes Page Background Arrange Page Set up Paragraph	2	7
	References Ribbon Table of Contents Citation And Index Footnotes Bibliography Table of Caption Authorities	2	7
	Mailing Ribbon Create Write and Finish Start Mail Merge Insert Files Preview Results	2	7
	Preview Ribbon Proofing Tracking Compare Comments Changes Protect	1	8
	View Ribbon Documents Views Zoom Macros Show / Hide Windows	1	8
	Microsoft Excel 2010 2.12.1 Introduction to MS-Excel 2.12.2 Why We use MS Excel 2.12.3 Environment of MS Excel 2.12.4 Spread Sheet 2.12.5 Fundamentals of MS Excel 2.12.6 Difference b/w MS.Word and MS Excel 2.12.7 Use of Mouse & Keyboard in Excel.	1	6
	MS Office Button 2.13.1 New Save as Publish 2.13.2 Open Print Close 2.13.2 Save Prepare	1	8
	Quick Access Toolbar E.mail Spelling Sorting Quick Print Undo Print Preview Redo	1	9
	Home Ribbon (Discuss in Detail) Clipboard Number Editing Font Style Alignment Cells	1	9
	Insert Ribbon Tables Charts Text Illustrations Links	1	9

	Page Layout Themes Scale To Fit Arrange Page Set up Sheet Option	2	9
	Formulas Insert Function Defined Names Watch Window Function Library Formula Editing Calculation	2	9
	Data Ribbon Get External Data Sort And Filter Outlines Connections Data Tools	2	9
	Review Ribbon Proofing Comments Changes	2	9
	View Ribbon Workbook Views Zoom Macros Show/Hide Windows	2	9
	Team Work Item Report Help Tree	1	8
	Introduction to MS Power Point Interface of Ms Power Point Advantage of Ms Power Point Start Ms Power Point What is Presentation Short Cut Keys	1	8
	Home Ribbon (Discuss in Detail) Clipboard Font Drawing Slides Paragraph Editing	1	10
	Insert Ribbon Tables Links Media Clips Illustrations Text	1	10
	Design Ribbon Page Set up Themes Background	1	10
	Animations Preview Transition to This Slide Advance Animations Slide	1	10
	Slide Show Ribbon Start Slide Set up Monitors	1	10

	Preview Proofing Comments Project **View** Presentation Views Zoom Windows Show/Hide Color/Grayscale Macros **Format Ribbon** Insert Shapes Word Art Styles Size Shape Arrange **Introduction to E-Commerce** 1.1.1. The Internet and Business 1.1.2. E-Commerce and its types 1.1.3. Domain Registration & Hosting 1.1.4. E-Commerce standards and terminologies 1.1.5. On line Payment Processing Solution/Merchant Account 1.1.6. Security issues in E-Commerce 1.1.7. Introduction to Hacking & Cracking	1 1 1 2	3 3 4 -
3)	**DATABASE MANAGEMENT SYSTEM USING MS-ACCESS 2010 & INTERNET MANAGEMENT**		
3.3	**Overview of a Data Base System** 3.3.1. Introduction to Database 3.3.2. Definition of a Database System 3.3.3. Properties and benefits of database system 3.3.4. Components of Database System 3.3.5. Database management system (DBMS) 3.3.6. What is RDBMS?	2	
3.4	**Introduction to RDBMS** 3.2.1. Database 3.2.2. Tables/relations 3.2.3. Attributes/Fields 3.2.4. Tuples/Rows 3.2.5. Entities/Tables 3.2.6. Key attributes and non key attribute 3.2.7. Degree and Cardinality	1	
3.5	**Relationship and its types** 3.3.1 One to one 3.3.2 One to many 3.3.3 Many to many 3.3.4 Referential integrity	1	
3.6	**Relational data integrity** 3.4.1 Primary key	1	

	3.4.2 Foreign key 3.4.3 Candidate key 3.4.4 Alternate key		
	Principles of Database Design 3.5.1 E.F. Code rules 3.5.2 Database Normalization and its forms 3.5.3 E-R Model/E-R Diagram	1	
	MS Access Environment	2	06
	Tables 3.6.1 Define the table and explain with examples 3.6.2 Methods of creating new table (s) 3.6.3 General Field properties: 3.6.3.1 Field size 3.6.3.1 Format 3.6.3.1 Input mask 3.6.3.1 Validation rule 3.6.3.1 Validation text 3.6.3.1 Caption 3.6.3.1 Default value 3.6.3.1 Required 3.6.3.1 Indexed	2	08
	Lookup field properties 3.7.1 Row source type 3.7.2 Row source 3.7.3 List row 3.7.4 Limit to list 3.7.5 Saving Table 3.7.6 Table Views 3.7.7 Deleting Tables	1	08
	Relationship 3.8.1 Creating, Deleting and Modifying Relationship		
	Queries and its Types 3.9.1 Select query 3.9.2 Action query 3.9.3 Update 3.9.4 Delete 3.9.5 Insert 3.9.6 Make table 3.9.7 Creating, Deleting and Modifying Queries 3.9.8 Query Views	2	08
	Introduction to SQL	2	06
	Forms and its types 3.11.1 Definition and uses of forms 3.11.2 Discuss the types of forms with examples	1	10

	3.11.3 Creating Forms Using Wizard and Design View 3.11.4 Adding and Deleting Controls 3.11.5 Changing Properties 3.11.6 Modifying Forms 3.11.7 Deleting Forms **Reports** 3.12.1 Definition and uses of reports 3.12.2 Creating Reports Using Wizard and Design View 3.12.3 Modifying Reports 3.12.4 Changing Properties **Pages** 3.13.1 Definition and uses of data access pages 3.13.2 Creating Data Access Pages Using Wizard and 3.13.3 Design View 3.13.4 Editing Webpage **Macros** 3.14.1 Definition and uses of Macros 3.14.2 Creating and Running Macros **Advance Concept** 3.15.1 Importing and exporting data 3.15.2 Database Tools	1 1 1 1	08 08 08 10
4)	**4.1 PROGRAMMING FUNDAMENTALS FLOW CHARTS AND PROGRAMMING WITH VB.NET** 4.1.1 Computer Programming Logic Definition Characteristics 4.1.2 Pseudo code Definition Examples	2	-
4.2	**Flow Charts** 4.2.1 System flow chart Symbols Examples 4.2.2 Program flow chart Symbols Advantages Disadvantages	2	14
4.3	**Sequential program flow charts**		
4.4	**Introduction to VB.net** 4.4.1 Basic.NET concepts 4.4.2 Using the development environment 4.4.3 Object Oriented Technique 4.4.4 New Active-X Control	4	14
4.5	**Introduction to VB.net Programming** 4.5.1 Creating Visual Basic. NET Project 4.5.2 Create Names List Application	4	14

	4.5.3 Working With Forms And Controls 4.5.4 Understanding Programming Concepts 4.5.5 Using Windows Forms 4.5.6 Working With Controls 4.5.7 Events Driven Programming in VB.NET 4.5.8 Create Variables And Constants 4.5.9 Using Structure And Arrays		
4.6	**Decision Structures And Loops** 4.6.1 Using Conditional Expression 4.6.2 Using Decision Structures 4.6.3 Using Conditional Loop Structure	4	14
4.7	**Creating Modules, Procedures & Functions** 4.7.1 Working With Procedures 4.7.2 Writing Sub Procedures 4.7.3 Sub Procedures Syntax 4.7.4 Calling a Function Procedure 4.7.5 Using a Function to perform a calculation 4.7.6 Subroutines and Functions 4.7.7 Built-in Functions	4	14
4.8	**Object-Oriented Programming** 4.8.1 Understanding Classes 4.8.2 Working with Classes 4.8.3 Inheritance and Polymorphism 4.8.4 Using Class Inheritance 4.8.5 Handling Errors and Exceptions 4.8.6 Using Debugging Technique 4.8.7 Structured Exception Handling	4	20
4.9	**Working With VB.Net Tool Box Controls** 4.9.1 Common Controls 4.9.2 Containers 4.9.3 Menu And Tool Bars 4.9.4 Data 4.9.5 Dialogs 4.9.6 Reporting 4.9.7 Components 4.9.8 Creating Menus 4.9.9 Creating Toolbars 4.9.10 Creating a Status-Bar 4.9.11 Using ADO.NET 4.9.12 Database Concepts 4.9.13 Working with Data 4.9.14 Creating a Contact List 4.9.15 Deploying Applications 4.9.16 Introduction to Deployment	3	16

4.10	**Debugging Visual Basic Programs** 4.10.1 Finding and Correcting Errors 4.10.2 Three types of Errors 4.10.3 Identifying the Logical Errors 4.10.4 Using Debugging Mode 4.10.5 Tracking Variables by using a Watch Window 4.10.6 Debugging Tools that display Data 4.10.7 Using the Immediate and Command Windows	3	18
4.11	**Working with Windows Form** 4.11.1 Creating Windows Forms Applications 4.11.2 Components of Windows Form User Interface 4.11.3 Windows Form Event Handling 4.11.4 Creating MDI Forms 4.11.5 Configuring Standard Controls 4.11.6 Windows Forms Controls by Function 4.11.7 Building Menus 4.11.8 Implementing Menus, Windows Forms 4.11.9 Using Tool Strip Controls 4.11.10 Windows Forms Data Binding 4.11.11 Providing user assistance and enhancing usability 4.11.12 Accessibility Features 4.11.13 Globalization And Localization 4.11.14 Localizing a Windows Form 4.11.15 Dialogue Boxes in a Windows Form Application 4.11.16 Windows From Inheritance 4.11.17 Generating Print Output 4.11.18 Printing in a Windows Form Application 4.11.19 Printing using Common Dialogue	3	19
4.12	**Data Base Programming With ADO.Net.** 4.12.1 Working with an Access Database 4.12.2 Database Connectivity 4.12.3 The Data Source Window 4.12.4 Using Bound Controls to display 4.12.5 Using SQL Statements 4.12.6 Using the Data Control & Grid View	4	19
4.13	**Reporting** 4.13.1 Design VB.Net Report 4.13.2 Using Crystal Report	3	18
5)	**Functional English**	20	20
6)	**Work Ethics (Lab. Theory)**	20	-
Total		**160**	**640**

DETAIL OF COURSE CONTENTS

Diploma in Information Technology
(01- Year)

Semester-II

Sr.#	Detail of Topic	Theory Hrs.	Practical Hrs.
1	**Graphics Design & Animation** **1.1. Digital Imaging / Template Designing Using Adobe Photoshop CS Technology** 1.1.1 Discussion on Publishing Media 1.1.2 Bitmap Graphics & Vector Graphics 1.1.3 Basic Design Issues 1.1.4 Lines, Shapes, Polygons, Rectangles & Ellipses 1.1.5 Web Color Theory & Color Wheel 1.1.6 Transform & Free Transform 1.1.7 Use of Layers Techniques 1.1.8 Filters/Plug Ins 1.1.9 Use of Different Selection Types 1.1.10 Image Adjustment 1.1.11 Use of different image (.jpg, .gif & .png etc) files formats. 1.1.12 Different Zoom Options 1.1.13 Use of Third Party Tools 1.1.14 Use of Slices & making of HTML files **1.2. Digital Illustration using CorelDraw X Series** 1.2.1 Drawing Tools using Rectangle, Circle, Lines, 1.2.2 Polygons, Star, Complex Star, Spiral, 1.2.3 Outline Tool & Fill Tool 1.2.4 Interactive Tools Using Blend, Extrude, Drop Shadow, Contour & Transparency 1.2.5 Ruler Adjustment & Ratio Setting 1.2.6 Editing Tools 1.2.7 Use of Nodes 1.2.8 Importing & Exporting 1.2.9 Use of Bitmaps in Design 1.2.10 Page Layout 1.2.11 Design Arrangements 1.2.12 Use of Symbols & Dockers **1.3. 2D Animation with Adobe Flash CS Technology** 1.3.1 Types of Animations 1.3.2 Animation Techniques 1.3.3 Difference between different types of Animations 1.3.4 Stage / Paste Board Setting 1.3.5 Frames & Key frames 1.3.6 Layer Masking & Guide Layer	5 5 5	45 45 45

	1.3.7 Types of Symbols (Graphic, Button & Movie Clip) 1.3.8 Scenes 1.3.9 Timeline & Timeline Effects 1.3.10 Introduction to Basic Actions 1.3.11 Web Publishing **1.4. Web Compilation using Adobe Dreamweaver CS Technology** 1.4.1 Making of HTML Static Page 1.4.2 Use of Design View & Code View 1.4.3 Defining a Site 1.4.4 Table Layout 1.4.5 Use if Div. Function 1.4.6 Use of Buttons & Navigation Bars 1.4.7 Form Designing & Use of Frames 1.4.8 Use of Spry Lists with CSS 1.4.9 Use of Layers Show/ Hide behavior 1.4.10 Hyperlinks & Hot Spots 1.4.11 Uploading Procedure & Updating Techniques using File Zilla.	5	45
2	**System Analysis & Design** **2.1. Introduction to System** 2.1.1 The System concept 2.1.2 Elements of a system 2.1.3 Characteristics of a system 2.1.4 Types of a System **2.2. Information System** 2.2.1. Definition 2.2.2. Components of information system **2.3. New System** 2.3.1. Consideration for the new system 2.3.2. Evaluation of old system 2.3.3. Technique and procedures for the implementation of the new system 2.3.4. The SDLC (System Development Life Cycle) **2.4. System Analyst** 2.4.1. Importance of System Analyst in SAD (System Analysis & Design) 2.4.2. Responsibilities of System Analyst **2.5. Feasibility Study** 2.5.1 Definition and Types of feasibility study 2.5.2 Presentation of case study 2.5.3 Cost-benefit Analysis 2.5.4 Feasibility study report	1 1 2 2 2	 2 2 2

	2.6. Fact Finding Technique 2.6.1 Fact gathering methods & tools for company project (Interviews, questionnaires, on-site observation, record reviewing, sampling)	2	3
	2.7. The Tools of Structured Analysis 2.7.1 Design Diagram: Computer based flow charting, E_R diagrams, Data Flow diagram, maintaining a data dictionary 2.7.2 Decision Tools: Decision tree, Decision table and Structured English.	2	3
	2.8. The Tools of Object-Oriented Analysis 2.8.1 Class Diagram Use case diagram 2.8.2 Sequence Diagram		
	2.9. Input Designing Concept 2.9.1 Input stages, input types, input media, input specification, input screen designing, layout chart.	2	2
	2.10. Output Designing Concept 2.10.1 Output definition, output media, output specification, layout charts, specification of printed output for the programmer, designing (case study).	1	2
	2.11. Testing and Debugging of System 2.11.1 Concepts of Testing and Debugging	2	2
	2.12. Documentation of System 2.12.1 Preparation of the user manual & technical manual.	1	
	2.13. System Implementation 2.13.1 Preparation of implementation, user personnel preparation, changes over procedures.	2	2
3.	**Introduction to Computer Networking** **3.1. Network Devices** 3.1.1 Modems 3.1.2 Multiplexers	4	20

	3.1.3 Concentrator 3.1.4 Connectivity Devices (Repeaters, Hubs, Bridges, Switch, Routers and Gateways). **3.2. Networking Resource Access Models** 3.2.1 Peer to Peer 3.2.2 Client / Sever 3.2.3 Server based **3.3. Types of Network** 3.3.1 LAN 3.3.2 MAN 3.3.3 WAN 3.3.4 Primary Network Components **3.4. Network Topology** 3.4.1 Definition of Topology 3.4.2 Bus Topology 3.4.3 Star Topology 3.4.4 Ring Topology 3.4.5 Mesh Topology 3.4.6 Hybrid Topology **3.5. Network Protocols and Architecture** 3.5.1 Definition of Protocols 3.5.2 Types of Protocols 3.5.3 OSI and TCP/IP protocol Architecture 3.5.4 IPV 4 and IPV 6	4 4 4	20 30 30 20
4.	**WEB DEVELOPENT USING PHP & MYSQL** **4.1. HTML Basics** 4.1.1 Creating & Formatting HTML Documents. Working with Lists, Images & Tables. Hyperlink & Image maps **4.2. Advanced HTML** 4.2.1. Layout with Frames 4.2.2. Working with Forms 4.2.3. Cascading Style Sheets. **4.3. JavaScript Basics** 4.3.1. Creating a simple Script. 4.3.2. Operator & Control Structures 4.3.3. Function & Object 4.3.4. Strings & Arrays. **4.4. Interactivity with JavaScript** 4.4.1. The document Object Model	4 4 4 4	

	4.4.2. Using Built in Objects. 4.4.3. Events & Event Handling.		5
	4.5. Advanced Web Features 4.5.1. Manipulating browser elements. 4.5.2. Validating Forms 4.5.3. Graphic & Animation.	4	4
	4.6. Labs. Creating an HTML document. Specifying a page title. Specifying a Background color. Text Color and Link Color. Formatting text.		5
	Creating an HTML document. Creating bulleted & numbered lists. Inserting images in the document and enhancing layout using tables.		4
	Creating an HTML document. Creating Links to previously created documents. Linking to other pages through images. And using image maps to link to different documents from the same image.		5 4
	Creating a page layout using frames. Experimenting with vertically and horizontally nested frames.		5
	Creating an HTML document and creating a form for a retail store, incorporating the various input methods.		5
	Creating custom styles in the CSS format and applying them to a series of previously created html documents.		10
	Creating a simple script in a page that displays a short message & using a script to display the current time on the page.		9
	Creating a webpage that displays a string from the smallest to the largest font size, by using different loops. Use conditional statements to display different alerts.		
	Creating & Calling Functions to display messages according to the input.		10
	Creating a script with various strings. Concatenating the strings. Calculating their length. Converting their casing and using the substring method. Creating an Array. Manipulating and accessing the array elements to create a scrolling message.		10
	Creating a page with a script that manipulates the		

	various element of DOM.Getting the browser version. Adding Back and Forward buttons to the page using the history object & using the document location object to redirect the browser to a new URL.		5
	Creating an HTML document with a script that uses built in objects to get the current time to convert it to UTC time. To perform various mathematical calculations,. Using the object properties to manipulate values.		5
	Creating a script that lets the browser respond to mouse events. Display alerts on mouse clicks. And launches popup windows on clicking a button. Using Keyboard events and the on Load Event.		5
	Creating a document with a button that launches a new browser. Using JavaScript to hide the scroll bars, the navigation bar and to launch fixed sized popup windows.		5
	Using the Form object to validate a form checking various input fields for the proper input.		10
	Creating an animation using an image array.		
	4.7. Introduction to Web Development 4.7.1 What is dynamic website? 4.7.2 What Is PHP? 4.7.3 What MySQL?		10
	4.8. Getting Started with PHP 4.8.1 Installing PHP and configuring Apache Web server on Windows / Linux 4.8.2 Installing PHP and configuring PHP on Windows / Linux 4.8.3 Modifications with php.ini 4.8.4 Installing MySQL 4.8.5 Add Database supports to PHP	2	9
	4.9. Basic PHP Techniques 4.9.1 Combining HTML and PHP 4.9.2 The importance of instructions terminators 4.9.3 Escaping the code 4.9.4 Commenting the code	2	9
	4.10. PHP Variables and Data Types 4.10.1 Variables types 4.10.2 Local and global variables 4.10.3 Predefined variables 4.10.4 Data types	2	10
	4.11. PHP Operators Types 4.11.1 Assignment operators	2	10

	4.11.2 Arithmetic operators 4.11.3 Logical operators 4.11.4 Using variables and operators in a calculations		
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	4.15. Working with Form 4.15.1 What is form? 4.15.2 Creating a form 4.15.3 Retrieving values from form 4.15.4 Putting a form to work	3	9
	4.16. Displaying Dynamic Contents 4.16.1 Redirecting to a new location 4.16.2 Displaying browser specific code	3	10
	4.17. Sending EMAIL 4.17.1 Working with file system 4.17.2 Writing data file 4.17.3 Reading data file	3	10
	4.18. Basic MySQL Commands 4.18.1 Create 4.18.2 Alert 4.18.3 Drop 4.18.4 Insert 4.18.5 Update 4.18.6 Delete	3	12
	4.19. Establishing a Database Connection With PHP 4.19.1 Connecting to MYSQL database	3	10
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	4.20.4 Connect to MySQL and create a table 4.20.5 Inserting data 4.20.6 Selecting and displaying data **4.21. User Authentication** 4.21.1 Basic HTTP authentication 4.21.2 Configuring authentication on Apachi 4.21.3 Creating the users and group files 4.21.4 Configuring the group files 4.21.5 Configuring the web server **4.22. Database Authentication** 4.22.1 Using PHP authentication variables to validate users 4.22.2 Using HTML forms to validate users 4.22.3 Limit by IP address **4.23. Session Management** 4.23.1 Understanding session variables 4.23.2 Starting a session and registering variables Managing user preferences with sessions	3 3 3	8 4 4
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6.	**Functional English-II**	20	20
7.	**Work Ethics-II**	20	-

REFERENCE BOOKS

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Subject Name	Reference Books
Introduction to Computer & Operating System (DOS, Windows7 & Linux)	1. The Concepts of Information Technology (5th Edition) by IT Series 2. A Comprehensive Study of Operating Systems & Networks (4th Ed) By IT Series 3. Microsoft Windows 7 Desktop support and Administration by Darril Gibson 4. The Complete Reference (Linux) Richard Peterson.
Business Applications & E-commerce	1. E-Commerce 2011 by Kenneth C. Laudon, Carol Guercio Traver Prentice Hall, 2010 - Business & Economics 2. The E-Commerce book: building the E-empire by Seffano Korper, Junaita Ellis
Database Management using MS-Access 2010	1. Fundamentals of Database Systems by Ramiz Elmasri and Shamkant Navathe 2. A Fundamental Study of Database Management Systems (2nd Ed) IT Series 3. 4. Access 20xx For Dummies By Laurie Ulrich Fuller, Ken Cook, John Kaufeld Publisher Wiley
Programming Fundamentals, Flow Charts and Programming with VB. Net.	1 An Introduction to Programming Using Visual Basic .NET by David I. Schneider 2. Vb .Net by Camron Wakefield, Henk Evert Sonder

SEMESTER-II

Subject Name	Reference Books
Graphics Design and Animation	3. Photoshop CS Bible by Deke McClelland 4. Flash Professional CS5 Bible by Todd Perkins 5. Adobe Dreamweaver CS5 Bible By Joseph Lowery
System Analysis & Design	1. System analysis and Design by Kendall and Kendall 2. System analysis and Design by Elias M. Awad 3. Applying UML and Patterns: An Introduction to Object-Oriented Analysis and Design and the Unified Process by Craig Larman

Web Development using PHP & MySql	1. JavaScript & HTML 4.0 Users Resource, William H. Murray & Chris H. Pappas, Prentice Hall, 2000 2. SAMS JavaScript in 24 Hours, Second Edition, Michael Moncur, SAMS,2000. 3. Creative HTML Design 2, Lynda Weinman, William Weinman, Lynda.com,2001. 4. PHP essentials by Julie C. Melonl 5. PHP 5 / MYSQL programming for the absolute beginners by Andy Harris 6. PHP & MYSQL for dynamic websites by Larry Ullman
Introduction to Computer Networking	1. Data Communications and Networking by Behrouz A. Forouzan 2. Data and Computer Communication by William Stallings 3. Computer Networks by Douglas. E. Comer

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